INTERNATIONAL SEARCH REPORT

10/53 68 4 0 int Rec'd Post And 31 MAY 2015 PCT/IB 03/05576

A. CLASSIF IPC 7	G11B23/38									
According to International Patent Classification (IPC) or to both national classification and IPC										
B. FIELDS	SEARCHED									
Minimum documentation searched (classification system followed by classification symbols) IPC 7 G11B										
Documentati	ion searched other than minimum documentation to the extent that su	ch documents are included in the fields se	arched							
	ata base consulted during the international search (name of data baseta, EPO-Internal, PAJ	e and, where practical, search terms used)								
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT									
Category °	Citation of document, with indication, where appropriate, of the rele	vant passages	Relevant to claim No.							
A	DE 197 49 807 A (STARKE ANDREAS D DR) 20 May 1999 (1999-05-20) column 3, line 5 -column 4, line column 5, line 25 - line 46; clai figure 2	29	1-3,5-7							
Α	US 5 652 838 A (LOVETT DONNA M E 29 July 1997 (1997-07-29) abstract; claims 1-5; figures column 3, line 40 -column 4, line column 6, line 61 -column 9, line	54	1-3,5-7							
A	US 5 896 256 A (WEISS LOUIS H ET 20 April 1999 (1999-04-20) column 4, line 49 -column 5, line figures 5-7	1,2,5-7								
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X Fur	ther documents are listed in the continuation of box C.	X Patent family members are listed	l in annex.							
° Special co	ategories of cited documents :	*T* tater document published after the into	ernational filing date							
"A" document defining the general state of the art which is not considered to be of particular relevance or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention										
E eartier	document but published on or after the international	invention *X* document of particular relevance; the	claimed invention							
which	cate leat which may throw doubts on priority claim(s) or n is cited to establish the publication date of another on or other special reason (as specified)	cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the								
O docum	nent referring to an oral disclosure, use, exhibition or means	document is combined with one or ments, such combination being obvicin the art.	ore other such docu-							
	nent published prior to the international filing date but than the priority date claimed	3" document member of the same patent family								
Date of the	e actual completion of the international search	Date of mailing of the international se	earch report							
9	9 March 2004	18/03/2004								
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2	Authorized officer	- · · · · ·							
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	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Herevant to claim No.
A	US 2002/105841 A1 (HARPER RICHARD H ET AL) 8 August 2002 (2002-08-08) page 1, paragraph 14 -page 2, paragraph 17; figures	1-3,5,7
A	PATENT ABSTRACTS OF JAPAN vol. 013, no. 570 (P-977), 18 December 1989 (1989-12-18) -& JP 01 237984 A (NEC HOME ELECTRON LTD), 22 September 1989 (1989-09-22) abstract; figures	1,2,6
Α	PATENT ABSTRACTS OF JAPAN vol. 009, no. 079 (P-347), 9 April 1985 (1985-04-09) -& JP 59 210568 A (MATSUSHITA DENKI SANGYO KK), 29 November 1984 (1984-11-29) abstract; figures	1,7,8
A	EP 0 159 090 A (PHILIPS NV) 23 October 1985 (1985-10-23) abstract; figures	1,7,8
Α	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 14, 22 December 1999 (1999-12-22) -& JP 11 250644 A (KENWOOD CORP), 17 September 1999 (1999-09-17) cited in the application abstract; figures	1,7,8
A	US 6 476 817 B1 (HARPER RICHARD H ET AL) 5 November 2002 (2002-11-05) abstract; figures	1-3
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 24, 11 May 2001 (2001-05-11) -& JP 2001 195866 A (NIPPON COLUMBIA CO LTD), 19 July 2001 (2001-07-19) abstract; figures	1,2,6





Information on patent family members

Internatik upplication No PCT/IB 03/05576

	AA-J		Dublication		Patent family		Publication
Patent document cited in search report			Publication date		member(s)		date
DE	19749807	Α	20-05-1999	DE	19749807	A1	20-05-1999
US	5652838	Α	29-07-1997	NONE			
US	5896256	Α	20-04-1999	US	5862025	A	19-01-1999
US	2002105841	A1	08-08-2002	US EP US	6476817 1347443 2003007275	A2	05-11-2002 24-09-2003 09-01-2003
JP	01237984	Α	22-09-1989	NONE			
JP	59210568	Α	29-11-1984	JP JP	1485217 63030713		14-03-1989 20-06-1988
EP	0159090	Α	23-10-1985	JP EP	60169794 0159090		11-11-1985 23-10-1985
JP	11250644	Α	17-09-1999	NONE			
US	6476817	B1	05-11-2002	US US	2002105841 2003007275		08-08-2002 09-01-2003
JP	2001195866	Α	19-07-2001	NONE			